

**BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY**

MEETING DATE: 4/21/04

DIVISION: COUNTY ADMINISTRATOR

BULK ITEM: YES

DEPARTMENT: AIRPORTS

AGENDA ITEM WORDING: Approval of a contract with Quality Communications Fire & Security, as specifically named contractor, to provide and install Object Recognition & CCTV upgrades at the Key West International Airport, and to waive the competitive bid process outlined in the Monroe County Purchasing Policy.

ITEM BACKGROUND: This security project will be funded under a 100% cooperative research agreement with the Transportation Security Administration. This is an unusual grant and an unusual project. We were approached by Quality Communications (who is currently performing another large Security Project here on the Airport) to apply for a very limited research security grant funded by the FAA and supervised by the TSA. We were one of seven airports in the Nation selected to install experimental "Virtual Fences". Because Quality Communications was our partner on this project from the beginning of the design and application phase for the Grant through project acceptance by the FAA and TSA, they should be considered the sole source for procurement and installation for this project only.

PREVIOUS RELEVANT BOCC ACTION: Approval of Cooperative Research Agreement with TSA, 2/18/04.

CONTRACT/AGREEMENT CHANGES: New contract

STAFF RECOMMENDATION: Approval

TOTAL COST: \$194,000.00

BUDGETED: Yes

COST TO AIRPORT: None

SOURCE OF FUNDS: TSA agreement

COST TO PFC: None

COST TO COUNTY: None

REVENUE PRODUCING: No

AMOUNT PER YEAR:

APPROVED BY: County Attorney X OMB/Purchasing X Risk Management X

DIRECTOR OF AIRPORTS APPROVAL _____


Peter J. Horton

DOCUMENTATION: Included X

To Follow

Not Required

AGENDA ITEM # C9

DISPOSITION: _____

MONROE COUNTY BOARD OF COUNTY COMMISSIONERS

CONTRACT SUMMARY

Contract #

Contract with: Quality Communications Fire & Security, Inc.,
(as specifically named contractor)

Effective Date: Execution
Expiration Date: ~ 90 days

Contract Purpose/Description: Provide and Install Object Recognition & CCTV Upgrades

Contract Manager: Bevette Moore
(name)

5195
(Ext.)

Airports - Stop # 5
(Department/Courier Stop)

for BOCC meeting on: 4/21/04

Agenda Deadline: 4/6/04

CONTRACT COSTS

Total Dollar Value of Contract: \$194,000.00

Current Year Portion: \$194,000.00

Budgeted? Yes

Account Codes: Pending setup, 4/21/04 BOCC

Grant: Yes - 100%, Transportation Security Administration

County Match: None

ADDITIONAL COSTS

Estimated Ongoing Costs: N/A
(not included in dollar value above)

For:
(eg. maintenance, utilities, janitorial, salaries, etc.)

CONTRACT REVIEW

	Date In	Changes Needed Yes No	Reviewer	Date Out
Airports Director	<u>4/6/04</u>	() (X)	<u>RTH</u> Peter Horton	<u>4/6/04</u>
Risk Management	<u>3/18/04</u>	() (X)	<u>Bill Johnson</u> William Grumhaus	<u>3/18/04</u>
O.M.B./Purchasing	<u>3/23/04</u>	() ()	<u>Sheila Barker</u> Sheila Barker	<u>3/23/04</u>
County Attorney	<u>4/1/04</u>	() ()	<u>Pedro Mercado</u> Pedro Mercado	<u>4/1/04</u>
Comments:	<u>OMB: Needs Ethics Clause and</u> <u>Public Entry Crime statement.</u> <u>OK ATTACHED</u>			

**GENERAL CONTRACT
PROVIDE AND INSTALL
OBJECT RECOGNITION & CCTV UPGRADES**

Project: *The Use of Smart Video Surveillance to Provide Enhanced Perimeter Security at Key West International Airport*

Agreement made on this Date: _____, 2004 between Quality Communications Fire & Security, Inc (QCFSI), of 3700 SW 30th Ave, Ft Lauderdale, Florida 33312 ("Seller"), and County of Monroe board of County Commissioners, DBA Key West International Airport, 3491 S Roosevelt Blvd, Key West, Florida 33040 ("Buyer").

1. ITEMS PURCHASED. For value received and other consideration, the Seller agrees with the Buyer to provide the Buyer the following products ("Goods") in accordance with the terms and conditions of this Contract:

<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
Object Video added solution to existing CCTV to provide enhanced security	1	\$194,000.00	\$194,000.00

Total Price: _____ \$194,000.00

2. PRODUCT STANDARDS. Goods shall comply with the Seller's quotation dated October 07, 2003 and incorporated into this Contract by this reference. This quotation is based upon the TSA grant for *The Use of Smart Video Surveillance to Provide Enhanced Perimeter Security at Key West International Airport*

3. TITLE/RISK OF LOSS. Upon Beneficial Use

4. PAYMENT. Payment shall be made to Quality Communications Fire & Security, Inc (QCFSI), 3700 SW 30th Ave, Ft Lauderdale, Florida 33312. Buyer agrees to pay to Seller the sum of \$194,000.00 as follows:

\$110,000 upon delivery of Object Video Servers and Software

\$32,500.00 upon installation of additional cameras and Object Video hardware & software

\$51,500.00 upon completion of acceptance testing

Payment terms are net 30 days after receipt of invoice.

If the Buyer should fail to make any of the payments set out in the above schedule, the Seller at its option may treat the Buyer's failure to pay as a material breach of this Contract, and may terminate this Contract and/or seek legal remedies.

The buyer may take a 1% discount if payment is received within 10 days of invoice

3/2/04
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5. DELIVERY. Time is of the essence in the performance of this Contract. Delivery of Goods shall be made according to the following schedule:

<u>Quantity</u>	<u>Description</u>	<u>Delivery Date</u>
1	Object Video added solution to existing CCTV to provide enhanced security	July 1, 2004

Seller is responsible for proper packaging of Goods so the Goods will arrive at the destination without damage. Any damage sustained due to improper packaging will be charged to Seller.

July 9th
June 1st is an estimated date based on 90 days delivery and installation time frame from the execution date of the contract, projected as April 1 2004

6. WARRANTIES. Seller warrants to Buyer that the Goods will conform to the applicable drawings and design standards, to meet the TSA Grant proposal submitted by QCFSI & Object Video.

Other Limitation of Warranty is included in attached Terms and Conditions

7. INSPECTION. The Buyer, upon receiving possession of Goods, shall have a reasonable opportunity to inspect the Goods to determine if the Goods conform to the conditions of this Contract. If the Buyer, in good faith, determines that all or a portion of the Goods are non-conforming, the Buyer may return the Goods to the Seller at Key West International Airport (EYW)'s costs. The Buyer must provide written notice to the Seller of the reason for rejecting the Goods. The Seller will have 30 days from the return of the Goods to cure any and all defects, or be held in breach.

NOTE

Attached is a copy of terms and conditions and a copy of the site plan (Attachment A) for camera and Object Video software coverage dated 2/25/04 that are hereby incorporated into this contract.

fel 3/2/04

8. TERMS AND CONDITONS. Attached

The parties have executed this Contract at Key West, the day and year above written.

Buyer:

County of Monroe BDA Key West International Airport

By: _____

Monroe County

Date: _____

Seller:

Quality Communications Fire & Security, Inc (QCFSI)

By: _____

John Peterson
Vice President

Date: _____

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY
BY *John Peterson*
ATTORNEY'S OFFICE
DATE 4/1/04

3/2/04

Terms and Conditions

Introduction: For good and valuable consideration, the parties agree that the terms and conditions contained herein are the sole terms and conditions of sale and/or for service and represent the sole and complete Agreement between the parties and supersede all prior oral and/or written representations, understandings, proposals, agreements, and communications regarding the subject matter hereof. The parties agree that no additional terms will be binding upon Quality Communications even if they appear on Purchaser's formal purchase order, acceptance form, or any other of Purchaser's documents unless signed by an authorized representative of Quality Communications.

PAYMENT TERMS: If not otherwise specified in the Contract Documents, the following applies:

- A. General Payment Terms are net thirty (30) days from date of invoice where satisfactory open account credit is established and maintained. Quality Communications reserves the right to revoke or modify Purchaser's credit at its sole discretion. A mobilization payment up to fifty percent (50%) will be invoiced upon acceptance of customer's order. Progress payments to one hundred percent (100%) of order value will be invoiced monthly based upon equipment delivered or stored and work performed. At Quality Communications' sole option, Purchaser shall pay cash in advance, or upon delivery, or as otherwise specified by Quality Communications. In the event that Purchaser defaults on its obligation to pay each invoice when due, then, in addition to all other rights and remedies available to it, Quality Communications shall have the option to withhold any further shipments of materials and/or the provision of services, if any, until Purchaser's account is fully paid. Further, in the event payment is not received according to Terms, Quality Communications may, at its discretion, assess interest at the maximum rate allowed by law or at the rate of 1.5% per month, whichever is less. Purchaser also agrees to pay all costs incurred by Quality Communications in pursuit of payment which is past due including, but not limited to, collection agency commissions and attorneys fees.
- B. Cancellation: Any cancellation must be made in writing. Recognizing that Quality Communications' damages arising from cancellation will be difficult to estimate or determine, the following charges shall be construed as liquidated damages representing an approximation of the administrative, engineering, and other costs Quality Communications will actually incur in reliance upon this Agreement, and not a penalty: If, prior to shipment, Purchaser cancels this Agreement or any portion thereof, for any reason not attributable to Quality Communications, Purchaser agrees to pay Quality Communications an amount equal to 20% of the price of the products canceled if the cancellation occurs more than 21 days after Quality Communications receives Purchaser's order or Purchaser accepts this Agreement. If Purchaser cancels after shipment, Purchaser agrees to pay the above 20% of the price of the products canceled, return the products already shipped, and to pay Quality Communications an additional amount equal to 20% of the value of the returned products to cover the estimated costs of transportation and restocking.
- C. Custom Software Payment Terms are as provided in section A. above with the following exceptions. A non-refundable twenty percent (20%) down payment will be invoiced upon acceptance of Purchaser's order. A non-refundable progress payment of forty percent (40%) of order value will be invoiced upon Purchaser's approval of a Custom Software Development Specification. The final forty percent (40%) payment will be invoiced upon delivery by Quality Communications of Custom Software.
- D. Security System / Access Control System Payment Terms are as provided in Section A. above with the following exceptions. A non-refundable 20% down payment is required with Purchaser's order. Progress Payments will be invoiced based upon shipments to Purchaser.

Quality Communications Services: Purchaser further agrees that Quality Communications offers various levels of services and that the Purchaser, after reviewing the same, has contracted with Quality Communications to perform only the services described in writing in this Agreement. Quality Communications denies liability for materials, supplies or work provided by other persons. Unless specifically contracted for, Quality Communications denies any supervisory role and this Agreement shall not commit Quality Communications to any supervisory role, including, but not limited to, the placement or routing of any wires or other Product.

Security Interest: The Purchaser grants to Quality Communications, and Quality Communications retains, a security interest in all Product, Software, and proceeds thereof shipped pursuant to this Agreement until the Purchaser shall have made full payment for the Product. Such interest is intended to be effective as a purchase money security interest. Purchaser agrees that Quality Communications may file this Agreement as a financing statement. In the event of failure to make payment on the due date in accordance with terms designated, the entire balance shall become due and payable at once. In case of default of payment, and to the extent permitted by law, Quality Communications shall have the right to take possession of the Product or Software immediately, wherever it may be found, and remove it with or without process of law and may retain all money paid hereunder as LIQUIDATED DAMAGES and rental for said product or Software. For the purposes of assisting Quality Communications in perfecting its security interests, in any Quality Communications Product or Software delivered to the Purchaser, Purchaser agrees to inform Quality Communications immediately if any other entity has or may have any security interest, perfected or otherwise, in the Quality Communications Product or Software described on the face of this Agreement and shipped to Purchaser. The Purchaser agrees to pay Quality Communications' costs of collection, including without limitation reasonable attorneys fees and legal expenses, and that the same are secured by the security interest granted herein. The Purchaser shall not sell, prior to payment, (except in the ordinary course of business), mortgage, pledge, or lease said Product or Software without prior written permission of Quality Communications.

Limitation of Warranty: Purchaser understands that Quality Communications is not an Insurer. Subject to the limitations below, Quality Communications warrants that the Product (as distinguished from Software) be free from defects in material and workmanship under normal use for a period of one year from the date of first beneficial use of all or any part of the Product or 18 months after Product shipment whichever is earlier, provided, however, that Quality Communications' sole liability, and purchaser's sole remedy, under said warranty, shall be limited to the repair or replacement of any Product, or parts thereof, which Quality Communications determines to be defective at Quality Communications' sole option and subject to the availability of service personnel and parts, as determined by Quality Communications. Quality Communications warrants expendable items including, but not limited to, video and print heads, television camera tubes, video monitor display tubes, and batteries and certain other products in accordance with the applicable manufacturer's warranty. Quality Communications does not warrant devices designed to fail in protecting a system such as, but not limited to, fuses and circuit breakers. Quality Communications warrants that any Quality Communications Software described in this Agreement, as well as that Software contained in or sold as part of any Product described in this Agreement, will substantially conform to its published specifications in effect at the time of delivery and for ninety (90) days after delivery. However, Purchaser agrees and

General Contract to Provide and Install Object Video at Key West Airport

Terms and Conditions - Page 1

3/26/04
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acknowledges that the Software may have inherent defects because of its complexity. Quality Communications' sole obligation with respect to software, and purchaser's sole remedy, shall be to make available published modifications, designed to correct inherent defects, which become available during the warranty period.

THIS WARRANTY DOES NOT APPLY TO ANY PRODUCTS OR SOFTWARE WHICH HAVE BEEN SUBJECTED TO ABUSE, MISHANDLING, OR IMPROPER USE AS DETERMINED BY QUALITY COMMUNICATIONS AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Warranty service will be performed at no charge between the hours of 8:00 am to 5:00 PM local time, Monday through Friday exclusive of Quality Communications' holidays. Warranty service requested to be performed at other than during Quality Communications' normal work hours shall be chargeable at Quality Communications' standard overtime rates. All repairs or adjustments that are or may become necessary under the warranty provisions of this agreement shall be performed only by an authorized representative of Quality Communications. Any repairs, adjustments, or interconnections performed by the purchaser or anyone other than an authorized Quality Communications representative shall void all warranties.

LIMITATION OF LIABILITY: QUALITY COMMUNICATIONS SHALL NOT BE LIABLE FOR ANY INDIRECT, INCIDENTAL, ECONOMIC, OR CONSEQUENTIAL LOSS OR DAMAGE TO THE PURCHASER OR USER OF THIS PRODUCT AND/OR SOFTWARE ARISING OUT OF, AMONG OTHER THINGS, THE OPERATION OR FAILURE OF THE PRODUCT AND/OR SOFTWARE TO OPERATE, THIS AGREEMENT, THE INSTALLATION, USE, DESIGN OR FUNCTION OF ANY QUALITY COMMUNICATIONS PRODUCT AND/OR SOFTWARE.

LIMITATION OF REMEDY: It is understood and agreed that since it is impractical and extremely difficult to fix actual damages, if any, or ascertain what, if any, portion of any loss or injury would be proximately caused by the failure of Quality Communications' Product and/or Software to operate, or to operate properly, or Quality Communications to perform any of its obligations or services described herein, UNDER NO CIRCUMSTANCES WILL QUALITY COMMUNICATIONS'S LIABILITY FOR ANY DAMAGES, INCLUDING BUT NOT LIMITED TO THOSE, ARISING IN ANY WAY OUT OF THE INSTALLATION, USE, DESIGN OR FUNCTION OR FAILURE TO FUNCTION OF ANY PRODUCT AND SOFTWARE SOLD BY QUALITY COMMUNICATIONS BE IN EXCESS OF THE PURCHASE PRICE PAID FOR THE PRODUCT, SOFTWARE AND/OR SERVICES. THIS SUM SHALL BE THE PURCHASER'S SOLE, COMPLETE AND EXCLUSIVE REMEDY AND SHALL BE PAID AND RECEIVED AS LIQUIDATED DAMAGES OR A LIMITATION OF LIABILITY AMOUNT AGREED ON BY THE PARTIES AND NOT AS A PENALTY. IN NO CIRCUMSTANCES WILL QUALITY COMMUNICATIONS BE HELD LIABLE FOR ANY CLAIMS, LOSSES, DAMAGES OF INJURIES ARISING FROM OR CAUSED BY, THE PURCHASER'S OR ANY OTHER PARTY'S MATERIAL, EQUIPMENT, ACTIONS, OR OMISSIONS. If Purchaser wishes Quality Communications to increase the amount of the above limitation of liability or liquidated damages amount stated in this Agreement, Purchaser may inquire about obtaining an increase to this amount in exchange for an increased purchase or contract price. Under no circumstances will an increase in the purchase or contract price be construed to mean that Quality Communications is an insurer or that the obligations of obtaining and maintaining insurance are not with the Purchaser.

INSURANCE OBLIGATIONS: It is understood and agreed by the Purchaser that Quality Communications is not an insurer and that it is the Purchaser's obligation to obtain and maintain any insurance covering any losses to property or personal injury or any other damage which may occur at the premises where the Quality Communications Product, Software or Services, which form the basis of this Agreement, are delivered, assembled, installed, used, or performed. The Purchaser agrees to list Quality Communications as an additional insured on all such policies and to provide Quality Communications a copy of the Certificate of Insurance upon request. Purchaser further agrees that the Certificate of Insurance shall contain a provision that coverage afforded under the policies will not be canceled or materially altered until at least thirty (30) days after written notice is given to Quality Communications.

WAIVER OF SUBROGATION: Purchaser does hereby for itself and all other parties claiming under it release and discharge Quality Communications from and against all hazards covered by Purchaser's insurance, it being expressly agreed and understood that no insurance company, insurer, or any other third party will have any right of subrogation against Quality Communications.

LIMITATION OF ACTIONS: The Purchaser hereby agrees that no claim, suit or action of any kind shall be brought against Quality Communications, its agents, employees, and/or officers more than one year after the claim arises, whether known or unknown when the claim arises, provided however, that if there is a claim, suit, or cause of action arising under the Warranty, it must be brought, if at all, within six months of expiration of the Warranty period stated above. This clause is in no way to be interpreted as an extension of the Express Warranty stated in paragraph 4 above.

DRAWINGS: All drawings and wire diagrams provided by Quality Communications in connection with this Agreement are protected under United States Copyright Laws and intended solely for the use of the installing contractor as a guide for the fabrication and installation of the system. These drawings and wire diagrams are prepared in accordance with the project plans and specifications available to Quality Communications at the time of the bid and are NOT intended to be System design or approval documents. Quality Communications is not a design professional. Under no circumstances is any clause in this agreement or any actions taken by Quality Communications to be construed in such a way as to impose upon Quality Communications the duties or liabilities of a design professional.

CHANGE ORDERS: This Agreement can be modified, amended or altered only by an Agreement in writing, signed by both parties or their duly authorized representatives.

SOFTWARE LICENSE AND USE: Software Products provided by Quality Communications are licensed, not sold, to the Customer. Customer has only a non-exclusive, non-transferable license to use the Software ("License"). Quality Communications retains all right, title and interest to the Software. In some cases, Quality Communications may have a right to relicense the Software. "Software" shall mean any part of Software provided by Quality Communications in machine readable form indicated on this Agreement or contained in any Quality Communications Product indicated on this Agreement or ordered subsequently, any modified versions and all related documentation. Customer shall use the Software only on the Product and at the Product Site listed herein. Any Software received by Customer at any time is subject to this Agreement. The License term begins upon delivery of the Software and continues until the last use of the Software with the Product, unless terminated. Quality Communications may terminate this License if Customer: (1) fails to perform any obligation under the Agreement; (2) ceases to do business as a going concern; or (3) has its assets assigned or attached by law. Within five (5) days after the License terminates, Customer shall, at its expense, return the Software to Quality Communications and destroy all copies of the Software, including memory or storage copies.

PROTECTION AND NON-DISCLOSURE: Customer shall maintain the Software in strict confidence and shall disclose it only to its employees requiring access. Customer shall implement adequate procedures controlling access to and use of the Software consistent with the protection of Quality Communications' rights. Customer may duplicate Software only for internal use on the Product according to Quality Communications instructions. The Quality Communications legend restricting Software use must appear on any copies of the Software. Customer shall not reverse compile the Software.

TITLE: The Software and any relevant Product as described in this Agreement shall remain the personal property of Quality Communications, even if attached to realty or other property. Customer shall not sell, assign, encumber or remove the Product or Software without the prior written consent of Quality Communications. Customer shall perform all necessary acts to preserve and protect the right, title and interest of Quality Communications in the Product and Software including but not limited to signing any financing statements or other documents requested by Quality Communications or its agents. Quality Communications may inspect the Product and Software during normal business hours and may affix labels or notices of ownership on the Product and Software.

FORCE MAJEURE: Quality Communications shall not be liable for any loss or damage of any kind resulting from delay, inability to deliver, or install, or to perform any other work under this Agreement on account of fire, flood, labor problems, access to premises, accidents, acts of civil or military authorities, acts of God, or from any other causes beyond Quality Communications' control.

TAXES, LICENSES AND PERMITS: The Purchaser is responsible for obtaining all licenses, and permits and for paying all applicable taxes and fees unless otherwise agreed to in writing.

INSTALLATION: The installation of the Goods is included as specifically provided for in this Agreement.

DRUG FREE WORKPLACE POLICY: Quality Communications has a written drug free workplace policy available for review by written request.

EXPORT COMPLIANCE: All sales hereunder shall at all times be subject to the export control laws and regulations of the Government of the United States. Purchaser agrees that it shall not make any disposition, by way of trans-shipment, re-export, diversion, or otherwise, except as said laws and regulations may expressly provide. Purchaser expressly agrees, to the fullest extent permitted by law, to indemnify Quality Communications for any and all damage arising from the violation of any export law or regulation with respect to any goods delivered to Purchaser or at Purchaser's direction. Said damages include, but are not limited to, legal fees, court costs, expert fees, and any and all other resulting costs and expenses.

EVENTS OF DEFAULT: Purchaser shall be in default of this Agreement upon the occurrence of, but not limited to, any of the following:

- A. The Purchaser's failure to make due and punctual payment of any payment due pursuant to this Agreement;
- B. The Purchaser's failure to perform any obligation under this Agreement;
- C. An order, judgment or decree entered, with the approval or consent of Quality Communications, by any court of competent jurisdiction, approving a petition seeking reorganization of the Purchaser or appointing a receiver, trustee, or liquidator (or other officer having power, under applicable law, similar to those of a receiver, trustee, or liquidator) of the Purchaser or of all or a major portion of its assets, and such order, judgment, or decree shall continue unstayed and in effect for any period of sixty (60) consecutive days;
- D. The Purchaser fails to provide Quality Communications with adequate assurances of due performance under the Agreement, after receiving a written request for same from Quality Communications;
- E. The Purchaser's financial position materially deteriorates; or
- F. The Purchaser shall cease to do business as a going concern.

GENERAL: Any provision of this Agreement which is prohibited by the law of any state shall, as to such state, be ineffective to the extent of such provision without invalidating the remaining provisions of the Agreement. This Agreement shall be construed under the laws of the State of Florida.

LOBBYING AND CONFLICT OF INTEREST CLAUSE
SWORN STATEMENT UNDER ORDINANCE NO. 910-1990
MONROE COUNTY, FLORIDA

ETHICS CLAUSE

John Peterson - QCFBI warrants that he/it has not employed, retained or otherwise had action on his/its behalf any former County officer or employee in violation of Section 2 of Ordinance No. 10-1990 or any County officer or employee in violation of Section 3 of Ordinance No. 10-1990. For breach or violation of this provision the County may, in its discretion, terminate this contract without liability and may also, in its discretion, deduct from the contract or purchase price, or otherwise recover, the full amount of any fee, commission, percentage, gift, or consideration paid to the former County officer or employee.

John Peterson VP
(signature)
Date: 3/24/04

STATE OF Florida
COUNTY OF Broward

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

John Peterson who, after first being sworn by me, affixed his/her signature (name of individual signing) in the space provided above on this 25 day of March, 2004.

C. Breaban
NOTARY PUBLIC

My commission expires:

OMB - MCP FORM 14



Cari Breaban
Commission #DD174692
Expires: Oct 05, 2004
Bonded Thru
Atlantic Bonding Co., Inc.

Received Time Mar. 24. 2:13PM

PUBLIC ENTITY CRIME STATEMENT

"A person or affiliate who has been placed on the convicted vendor list following a conviction for public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list."

By: John P. Peller VP 3/24/04



February 9, 2004

Jerome Fain - Airport Security Director
Key West International Airport
3491 S. Roosevelt Blvd.
Key West, Florida 33040

Ref: TSA Grant for Pilot Projects

Dear Mr. Fain:

Thought I would take a moment to summarize our conversations to this point. It was good to hear that the airport is on the county agenda to accept the grant money this month. Of the seven (7) airports to be approved for these grants, Key West is the only one who has not yet accepted the grant and started the project. Obviously, we want to do what we can to help. We are also concerned at the recent suggestion that Key West might "bid" out this project.

Quality Communications Fire and Security, Inc. worked closely with Object Video and Key West International Airport to write this grant and push it through the TSA. If you reference the grant proposal, Quality Communications Fire and Security is specifically named as the contractor for this job. The funds were awarded for this project to be installed by this team.

There are many additional reasons, QCFSI and Object Video (OV) must execute this work.

- QCFSI is currently installing the new base camera system. This base system is tied into the TSA grant system on many levels (hardware and software). QCFSI must be the integrator to tie into this system to maintain the integrity of the base system and to provide any type of warranty.
- QCFSI and OV designed this entire system specifically to integrate into the existing system and meet specific TSA guidelines for security and testing. We are using six (6) of the cameras in the QCFSI base project for part of the TSA project.
- QCFSI, as you can see from the attached letter, is the only Florida certified Object Video installer/service in Florida. We are the only ones who can do this.
- QCFSI and Object Video are specifically mentioned in the grant under "Project Team", and it the project was funded by the TSA with this understanding.

February 9, 2004

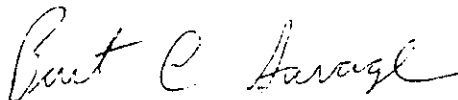
- If you were to bid this job, you would have to hire an engineering consultant to "design" a system as well as someone to write specifications and bid documents. Not only are these expenses not covered by your grant (\$20,000-\$30,000), it would take 6-9 months for this process to occur. You must accept and use this grant by the end of the year. This includes the testing phase of the project. Basically, installation needs to be finished by May. In addition, you would violate all confidentiality rules in place by the TSA. This is a need-to-know project and should not be advertised publicly. This is why the grant asked for the project team up front. QCFSI and Object Video were granted clearance to do this project when Key West was chosen for the grant. Our companies were thoroughly researched by the TSA.

Jerome, QCFSI feels very strongly that it is in the best interests of Key West International Airport to award this job to our team. As you know, QCFSI did all of the up-front design, engineering, and document preparation and submittal. All of this (\$12,000 in billable work) was done at no cost to Key West Airport as we were to recoup our costs as part of this grant. If the grant is accepted by Key West, it is accepted for a specific design, product and team. That was its purpose. Finally, by selecting QCFSI and OV as the grant stated, Key West International airport would minimize its responsibility, as the airport would be using QCFSI's design and team, as approved by the TSA, to execute this project.

I am available to talk to your county attorney at any time about this project. It is our hope that, at your county meeting in mid-February, the county would not only accept the grant money from the TSA, but also award the project, in its entirety, to Quality Communications Fire and Security, Inc. as the prime contractor. We would, of course, then subcontract the software portion of the job to Object Video and proceed with installation.

Should you have any questions, or require any further information, please do not hesitate to contact me.

Sincerely,



Bart C. Savage
Account Executive
QUALITY COMMUNICATIONS FIRE AND SECURITY, Inc.



11600 Sunrise Valley Drive, Suite 290
Reston, Virginia 20191
Phone (703)654-9300
Fax (703)654-9399
www.objectvideo.com

February 2, 2004

Jerome Fain
Airport Security Director
Key West International Airport
Key West, Florida

Dear Director Fain,

In reference to the TSA-FAA Grant Application for using ObjectVideo intelligent video surveillance to enhance the perimeter security of Key West Airport, ObjectVideo indicated a desire to work with Quality Communications, Inc., (QCI). QCI is a preferred partner of ObjectVideo, as it is the only integrator in Florida who is trained and certified to support and install ObjectVideo technology. As such, QCI will be responsible for providing Key West Airport with first tier troubleshooting and maintenance support, as well as helping to install the system. ObjectVideo will, of course, provide factory support from our offices in Reston, Virginia, but QCI is the only company certified to provide customer support for us in Florida.

Sincerely,

Melchior Baltazar
Director, Critical Infrastructure Protection

July 16, 2003

To: Nicole Feriozzi
WJ Hughes Technical Center
Aviation Research Center Office, ACX-50
Atlantic City International Airport, NJ 08405

**Proposal For TSA Grant to Airport Authorities for Pilot Projects
For Key West International Airport**

Key West International Airport is pleased to submit the enclosed proposal in response to the TSA Announcement of Funding for Grants (Cooperative Agreements) to Airport Authorities for Pilot Projects, dated June 12, 2003.

Should you have any questions regarding this proposal or the associated documents, please don't hesitate to contact us.



U.S. Department of Transportation
Federal Aviation Administration

COVER SHEET FOR PROPOSALS TO THE FEDERAL AVIATION ADMINISTRATION

Form Approved:
O.M.B. No 2120-0559

FOR CONSIDERATION BY FAA ORGANIZATION UNIT
Indicate the most specific unit known i.e. program, division, etc.
Dept. of Homeland Security / Transportation Security
Administration

SOLICITATION NUMBER
Announcement for Funding of Grants (Cooperative
Agreements) to Airport Authorities for Pilot Projects, June
12, 2003

EMPLOYER IDENTIFICATION NUMBER (EIN) or TAXPAYER IDENTIFICATION NUMBER (TIN) 59-6000749	SHOW PREVIOUS GRANT NUMBER IF THIS IS A SUPPLEMENT TO AN EXISTING GRANT	IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? YES ___ NO <u>X</u> IF YES, LIST ACRONYM(S)
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NAME OF ORGANIZATION TO WHICH AWARD SHOULD BE MADE: Key West International Airport	INSTITUTION NAME (IF KNOWN) Not applicable
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ADDRESS OF ORGANIZATION (INCLUDE ZIP CODE)
3491 South Roosevelt Blvd., Key West, FL 33040

CONGRESSIONAL DISTRICT 20th COUNTY Monroe

SUBMITTING ORGANIZATION: ☐ ACADEMIC INSTITUTION ☐ NON-PROFIT ORG ☒ FOR-PROFIT ORG ☐ OTHER

BRANCH/CAMPUS/OTHER COMPONENT (Where work is performed, if different from above)

TITLE OF PROPOSED PROJECT The Use of Smart Video Surveillance to Provide Enhanced Perimeter Security at Key West International Airport.

REQUESTED AMOUNT: \$195,400.00	PROPOSED DURATION 12 months	REQUESTED STARTING DATE 9/1/2003
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PI/PD DEPARTMENT Not applicable	PI/PD PHONE NUMBER	PI/PD FAX NUMBER
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NAMES (TYPED)	SOCIAL SECURITY NO.	HIGHEST DEGREE & YEAR	SIGNATURE
PI/PD Peter Horton Jerome Fain	265-39-9794	High School 1978	
CO-PI/E:MAIL ADDRESS ObjectVideo (see above)			
CO-PI/PD			
CO-PI/PD			
CO-PI/PD			

By signing and submitting this proposal, the authorized official of the applicant institution is providing certification regarding federal debt status, debarment and suspension, drug-free workplace, and lobbying activities

(If answering "yes" to either, please provide explanation.)	YES	NO
Is the organization delinquent in any Federal debt?		✓
Is the organization or its principals presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency?		✓

AUTHORIZED INSTITUTIONAL REPRESENTATIVE NAME/TITLE (TYPED) Director Jerome Fain Jr Security & Operations Manager	SIGNATURE 	DATE 7-18-03
TELEPHONE NUMBER 305-296-8099	FAX NUMBER 305-296-8974	

**The Use of Smart Video Surveillance
To Provide Enhanced Perimeter Security
At Key West International Airport**

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1. Project Summary

U.S. airports currently face an extremely challenging security environment, with threats ranging from common, opportunistic criminal activity, through activities by more sophisticated organized criminal elements to terrorist activity. As advances are made in fields, like computer vision, with the potential to improve physical security systems, it is important to make the benefits of those advances, in the form of enhanced security systems or capabilities, available as soon as possible. In order to ensure that promising R&D efforts do translate into gains for airport security, Key West International Airport, in concert with ObjectVideo™, is proposing an innovative pilot project to exploit the advanced features of ObjectVideo's™ Video Early Warning (hereinafter VEW) product to provide a virtual, secure perimeter for the airport's SIDA area, and to strengthen perimeter security for the aircraft quarantine area and the fuel depot.

An aggressive plan is being proposed for the deployment and testing of smart video surveillance capabilities (including automatic target detection, classification and tracking, detection of threats like left bags and loitering in security areas, etc) at Key West International Airport with the goal of enabling the fast and efficient proliferation of the most successful of these capabilities to other airports in the US.

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2. Project Description

U.S. airports currently face an extremely challenging security environment, with threats ranging from common, opportunistic criminal activity (e.g. thefts by untrustworthy baggage handlers), through activities by more sophisticated organized criminal elements (e.g. organized drug smuggling efforts) to terrorist activity (e.g. terrorist operatives attempting to bring down airliners with shoulder-held rocket launchers). As advances are made in fields, like computer vision, with the potential to improve physical security systems, it is important to make the benefits of those advances, in the form of enhanced security systems or capabilities, available as soon as possible. In this response to the Department of Homeland Security (hereinafter DHS) / Transportation Security Administration (hereinafter TSA) announcement of funding for grants to airport authorities for pilot projects, the Key West International Airport (hereinafter KWI) is proposing an extensive pilot project to bring smart video surveillance capabilities and advanced computer vision techniques to bear in providing an innovative virtual secure perimeter for KWI's SIDA area, and strengthening perimeter security for other vital areas at the airport.

2.1. Project Team

For this effort, KWI has assembled an outstanding team that includes ObjectVideo™ and Quality Communications Fire & Security of Florida, Inc. (hereinafter QCI). ObjectVideo™, the leading developer of intelligent video surveillance software for physical security applications, was founded in 1998 by a team of former research scientists from the Defense Advanced Research Projects Agency (hereinafter DARPA) whose expertise in an elite area of artificial intelligence known as computer vision provided the nucleus around which the company was formed. In keeping with this foundation, ObjectVideo's™ corporate mission is to provide a reliable conduit for the efficient movement of computer vision research from the laboratory into commercially successful software products and solutions addressing both the current and future video surveillance needs of customers and potential customers. This corporate mission encompasses three principal objectives:

- Research aimed at advancing the state-of-the-art in the field of computer vision
- Business practices aimed at accomplishing the successful, timely, and efficient transfer of advances in computer vision from laboratory to commercially viable software and service offerings
- The maintenance of a high level of integrity in all dealings, and at all levels of the company.

Headquartered in Reston, Virginia, ObjectVideo™ currently has close to 50 employees, with the majority being involved in product development or the delivery of professional services. ObjectVideo's™ client list includes both commercial entities such as BP, and government organizations such as the US Department of Energy, the US Customs Service, Andrews Air Force Base, the Office of Naval Research, and the Pentagon Force Protection Agency. ObjectVideo™ was founded on the concept of providing a reliable conduit for the timely, efficient movement of computer vision research from the laboratory into commercially successful software products and solutions and continues to live up to that goal by bringing advanced video surveillance and analysis capabilities to market for its growing customer base.

QCI is an experienced integrator and installer specializing in all aspects of low-voltage and telecommunications cabling systems, with demonstrated expertise in handling installations of voice grade cabling, state-of-the-art fiber optics, security systems, and access control systems, among others. Founded in 1990, the company currently has more than 60 technicians and RCDDs on staff, and boasts a management team with over 100 years of combined technical and

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engineering experience. QCI's corporate objectives are to maintain a competitive edge while providing the highest quality of service possible to their growing customer base.

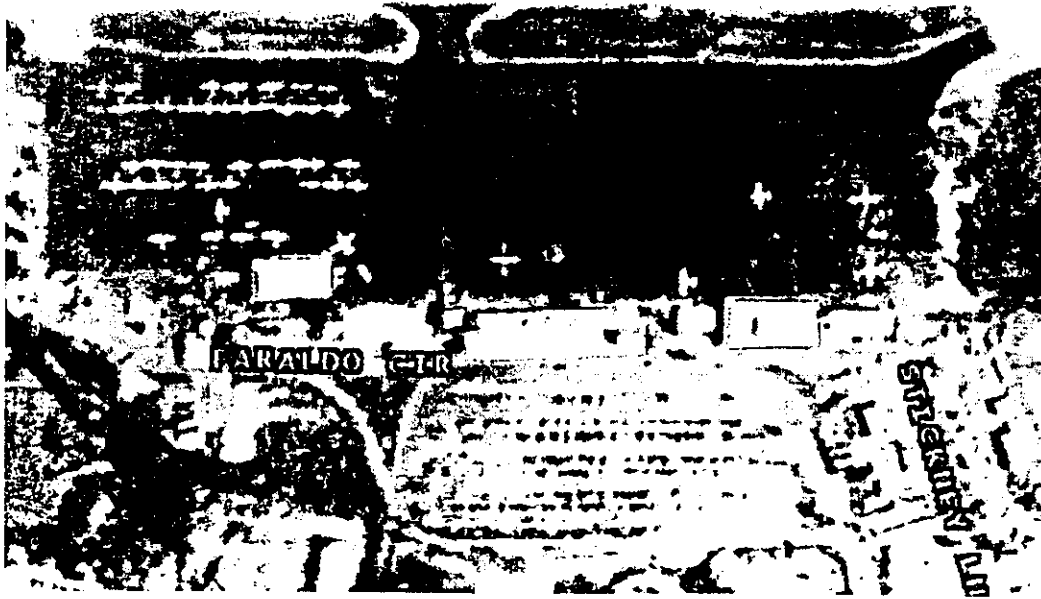


Figure 1: Key West International Airport - Overview

2.2. Purpose

The purpose of the pilot project proposed here is to exploit the advanced features of ObjectVideo's™ Video Early Warning (hereinafter VEW) product to investigate the use of secure virtual perimeters and to provide significantly enhanced security for physically bounded perimeters (e.g. perimeters bounded by a perimeter fence) at KWI. A detailed work plan has been developed enabling an aggressive effort to accelerate the move of smart video surveillance technologies currently in product development and/or testing from that environment into use in "real world" situations and, by doing so, to significantly enhance security capabilities available to airports across the US.

KWI is confident that the team assembled for this effort can successfully implement the proposed enhancements in a way that will not only demonstrate their value but will also establish a solid basis for their proliferation to other airports throughout the US. KWI is confident that this pilot effort will serve as a solid initial step in enhancing air transportation safety on a national level.

2.3. Objectives

The overall goal of the proposed pilot project is the enhancement of physical security at Key West International Airport by establishing a secure virtual perimeter to provide after-hours protection for the airport's SIDA area, and strengthening security along existing physical perimeter fence lines bordering KWI's aircraft quarantine area and the airport's fuel depot. These goals are reflected in the objectives established for this effort. Many of these objectives can be met by making use of features included in the current version of ObjectVideo's™ VEW software application while others will require the early implementation of features currently scheduled for future versions of the product. ObjectVideo's™ schedule for implementation and deployment of

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enhancements to the VEW application will be adjusted in order to ensure that all of the objectives listed here are met within the time scheduled for this pilot project.

The table below lists the objectives for this area, and provides a brief description for each objective.

Objective	Description
Set Virtual Tripwires	A line is positioned across the image of an area being observed (e.g. across a corridor, along a fenceline) when a person or vehicle moving through the area crosses the point designated by the line, or virtual tripwire, an alert is generated
Establish Areas of Interest / Disinterest	The image of an area under observation can be sectioned and sections designated as areas of interest or areas of disinterest. Actions or events taking place inside an area of interest will generate alerts. Actions or events occurring inside an area of disinterest will be ignored by the system
Detect Loitering	The system will detect people and/or vehicles remaining inside an area of interest for longer than a specified amount of time, and will generate an alert.
Detect the Removal or Insertion of Objects in Areas of Interest	The system will detect the removal of objects from areas of interest (e.g. the removal of a painting from its usual place on a gallery or museum wall) or the insertion of an object into an area of interest (e.g. an unattended bag or backpack left in an area where luggage should not be unattended) and will generate an alert.
Detect Gross Changes	The system will detect changes in the image that may indicate tampering with the camera. These might include the camera's have been moved from its original position (pointed away from the area under observation), the camera being covered, the lens being obscured in some other way (e.g. by someone spray-painting the lens), or bright light being shone into the camera to blind it. The system will generate an alert when any of these conditions is detected.
Detect and Track Objects	The system will detect people, vehicles, or other objects, or targets, of interest and will be able to track those targets as they move through the area being observed.
Count Tracked Objects	The system will be able to count objects, or targets, being tracked.
Classify Tracked Objects	The system will recognize different classes, or types, of objects, such as people, and vehicles. The system also allows for user defined classes, which can be used to designate objects such as specific types of vehicles allowed within a SIDA area. Objects will be classified by attributes such as size, motion, and color.
Perform Multi-Camera Target Tracking and Handoff	The system will be capable of tracking a specific target (e.g. person or vehicle) as the target moves through the fields of view of multiple cameras and will maintain consistent information on the target's motion or trajectory.

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Perform Automatic Image Stabilization	The system will stabilize images by compensating for camera motion (e.g. a stationary camera mount being shaken by a strong wind).
Provide a Map-Based GUI	The user interface display will be based on a map or satellite image of the site (or relevant section of the site) and will display icons indicating camera placement and alert status. Alerts generated by the system will be clearly indicated on the interface display.

2.4. Pilot Project Work Plan

The work plan presented in this section has been developed for implementation of the pilot project proposed here for KWI. The project involves the implementation of a secure virtual perimeter for the entire SIDA area at the airport and the significant enhancement of security along existing perimeter fencelines bordering the aircraft quarantine area and the fuel depot. As an initial step in this process, ObjectVideo™ VEW will be installed on a server residing in a centralized location at KWI. The server and installed copy of VEW will be capable of supporting all camera installations (both existing and new) required for this effort. Where necessary, infrastructure will be enhanced and fiber optic cable will be laid to provide high speed connections between cameras and server.

The pilot project here proposed involves two specific areas of endeavor:

- 1) The installation of cameras and the development of VEW rules necessary to establish a secure, virtual perimeter around the SIDA area. This perimeter will only be activated after normal airport hours, to protect that area when normal airport operations have shut down for the evening.
- 2) The installation of cameras and the development of VEW rules necessary to set up smart video surveillance of existing physical perimeter fencelines bordering the aircraft quarantine area, and the airport's fuel depot. Unlike the secure virtual SIDA perimeter, these measures will be active around the clock.

Each of these proposed enhancements will involve the physical deployment of equipment such as cameras, camera mounts, illuminators, etc. as well as the implementation of rule sets, designed to deal with the specific security challenges presented by aspect of the project, in the ObjectVideo™ VEW system.

Sections 2.4.1., 2.4.2., and 2.4.3. describe the sites or areas involved in this pilot project, the security challenges associated with each of these sites, and the measures proposed to provide the innovative virtual perimeter approach and the significant enhancements to perimeter security.

2.4.1. Secure Virtual Perimeter - SIDA After Hours

While operations in the SIDA area at KWI are physically secured by the presence of airport, and specifically SIDA area assigned, personnel during normal airport operating hours, KWI is unusual among international airports in that normal airport operations shut down at a certain time in the evening and remain shut down until the following morning. It is establishing and maintaining security in this SIDA area in the hours during which the airport is shut down that are a serious concern. The installation of a permanent physical barrier such as a fence is not compatible with normal airport operations in and around this area therefore there is no easy physical way to ensure that the area is secure during those hours. KWI is, therefore, proposing an

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innovative approach in which the capabilities of ObjectVideo's™ VEW application are used to establish a virtual barrier effectively securing the airport's SIDA area.



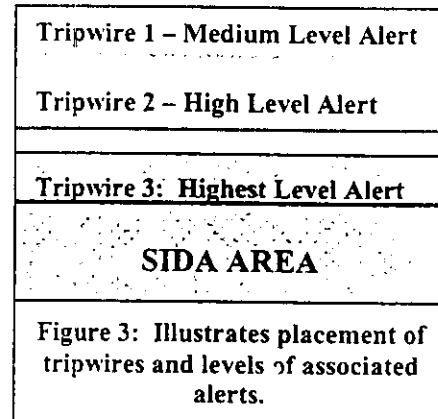
Figure 2: SIDA area at Key West International showing proposed camera coverage. SIDA area is the rectangular area, elongated triangular areas indicate fields of view providing almost complete coverage of the area.

The SIDA area at KWI is a long, rectangular area covering the area in front of the terminal as adjacent buildings. The physical

enhancements required for the implementation of a virtual perimeter barrier include the installation of six IDN (Day / Night) cameras with overlapping fields of view providing almost complete coverage of the SIDA area.

The virtual perimeter itself is established by developing a set of rules in VEW that will enable the system to deal with situations that represent potential threats in this area.

- 1) Designate an area of interest encompassing the SIDA and the some of the area immediately adjacent to it. This establishes the boundaries of the area in which rules (e.g. loitering detection) designated for this area will be applied.
- 2) Establish tripwires near and at the boundary of the secured area. Tripwires will be established to enable the generation of alerts when people or vehicles are detected approaching the perimeter. These tripwires will be drawn in at least three places, one outside of the SIDA boundary, one at the SIDA boundary, and one just inside the boundary. An escalating series of alerts will be generated, dependent upon the tripwire crossed, to inform security personnel of the potential seriousness of any incursion threat. Figure 3 provides an example of the placement of these tripwires and the urgency level of the alerts generated at each point.
- 3) Classify targets approaching or intruding into the SIDA area. The system will not only detect people, vehicles, etc. approaching or crossing into the SIDA area, but will also be able to classify the target and to deliver information on the type of target to security personnel. Target classifications will include not only target types such as people, vehicles, aircraft, etc. that represent potential threats and should generate alerts, but also targets such as wildlife that do not represent a threat and which should not generate alerts.
- 4) Detect loitering in the area of interest adjacent to the SIDA area. People or vehicles loitering in this area could represent a serious threat. Loiterers could be individuals making observations or testing security provisions in preparation for an attack or individuals actively intending to carry out such an attack. A set of rules will, therefore, be implemented enabling the detection of people, vehicles, etc. that remain in this area of interest for over a specified amount of time. If loitering is detected alerts are generated to inform security personnel.



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- 5) Detect the presence of bags, packages, or other suspicious objects in the area of interest. Objects left in the area of interest could constitute a significant threat to the SIDA. Rules will be implemented, therefore, to detect the insertion of any object into the area of interest, and to generate an alert to inform security personnel of the presence of the suspicious object.
- 6) Detect the removal of an object from the area of interest. Removal of objects from the SIDA could indicate theft or attempted theft. The system will detect when/if objects are removed from the area and will generate an alert for security personnel.
- 7) Detect any possible tampering or attempted tampering with surveillance cameras. People wishing or intending to evade the surveillance system set up to protect the SIDA perimeter may attempt to do so by tampering with the surveillance cameras set up in the area. Rules will be implemented detecting tampering such as blinding the cameras in some way (covering cameras, spray painting lenses, etc), turning cameras off target, or interrupting either power to the cameras or video feed from the cameras. Detection of any tampering or tampering attempts will generate alerts for security personnel.

2.4.2. Enhance Perimeter Security – Aircraft Quarantine Area

One of the recurring problems experienced at KWI is the landing of aircraft that have been hijacked or stolen and flown from Cuba to Key West. When hijacked or stolen aircraft land at Key West the aircraft themselves are seized by Federal law enforcement officials and are quarantined in an area of the airport to the right of the SIDA area, and bordered by the airport perimeter fence. The area is problematic for a number of reasons.

- 1) While bordered by the airport perimeter fence on one side, this area is completely open on the other sides, with no physical barrier to prevent incursion into the area.
- 2) A significant part of the aircraft quarantine area bordered by the airport perimeter fence is placed so that it is out of sight of guards in a central station, and is not currently covered by any surveillance cameras. This constitutes a significant “blind spot”.
- 3) The perimeter fence section bordering the aircraft quarantine area faces a heavily wooded area just outside of that fence. The trees along this section of fence encroach closely on, and in some areas, overhang the fence. This area could easily constitute cover for people attempting to get into the quarantine area by going over the fence.

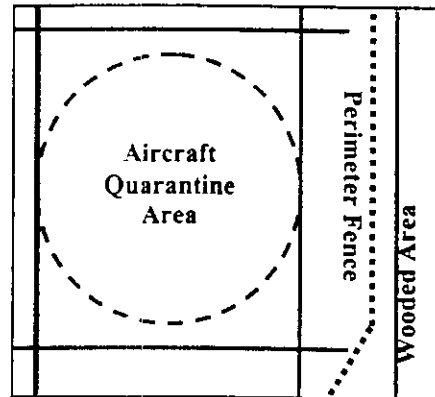


Figure 4: Aircraft quarantine area, proposed coverage and tripwire placement. Cross hatched area indicates proposed camera coverage. Solid red lines indicate tripwire placement.

The installation of cameras providing coverage of the SIDA area will also provide coverage of the aircraft quarantine area. This coverage will allow for the set up of rules in ObjectVideo™ VIEW enabling KWI to virtually secure this area. These rules will include those listed below.

- 1) Designate an area of interest encompassing not only the aircraft quarantine area but much of the area around it, up to and slightly past the airport perimeter fence. The area of interest should extend beyond the quarantine area on the three sides that are not bordered

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- by the perimeter fence. The area of interest should cover all of the area that lies in the "blind spot".
- 2) Establish tripwires surrounding the area, and slightly beyond the fence. Tripwires will be established to enable the generation of alerts when people or vehicles are detected approaching or entering the area. Tripwires will be placed just inside the perimeter fence, and on the three unprotected sides of the area. A trip wire may also be placed on the far side of the perimeter fence.
 - 3) Classify targets approaching or intruding into the aircraft quarantine area. The system will not only detect people, vehicles, etc. approaching or crossing into this area, but will also be able to classify the target and to deliver information on the type of target to security personnel. Target classifications will include not only target types such as people, vehicles, aircraft, etc. that represent potential threats and should generate alerts, but might also include targets such as wildlife that do not represent a threat and which should not generate alerts.
 - 4) Detect loitering in the area of interest adjacent to the aircraft quarantine area. People or vehicles loitering in this area could be planning or attempting an incursion into this area. A set of rules will, therefore, be implemented enabling the detection of people, vehicles, etc. that remain in this area of interest for over a specified amount of time. If loitering is detected alerts are generated to inform security personnel.
 - 5) Detect the presence of bags, packages, or other suspicious objects in the area of interest. Rules will be implemented, therefore, to detect the insertion of any object into the area of interest, and to generate an alert to inform security personnel of the presence of the suspicious object.
 - 6) Detect the removal of an object from the area of interest. The system will detect when/if objects are removed from the area and will generate an alert for security personnel.
 - 7) Detect any possible tampering or attempted tampering with surveillance cameras. People wishing or intending to evade the surveillance system set up to protect the aircraft quarantine area may attempt to do so by tampering with the surveillance cameras set up in the area. Rules will be implemented detecting tampering such as blinding the cameras in some way (covering cameras, spray painting lenses, etc), turning cameras off target, or interrupting either power to the cameras or video feed from the cameras. Detection of any tampering or tampering attempts will generate alerts for security personnel.

2.4.3. Enhance Perimeter Security – Fuel Depot

The KWI fuel depot lies beyond the terminal buildings and represents an area that requires protection for obvious reasons. Any attempt at sabotage at this site could cause serious damage to the airport facilities and could endanger airport staff or passengers. While the Fuel Depot is protected by a perimeter fence, surveillance of the area should be enhanced to prevent intruders entering the area by climbing the fence and to prevent incidents such as those where objects (e.g. explosive devices) are either thrown over the fence or left just outside the fence.

In order to better secure the fuel depot area two cameras will be installed to cover the area, and will be connected to the ObjectVideo™ VEW system. A set of rules will be implemented in the VEW system to provide the coverage required for this area. The rules that will be implemented for this area will include those listed here.

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- 1) Designate an area of interest encompassing not only the fuel depot itself but also including a significant area around the depot's perimeter fence. This will define the area in which specified actions will trigger alerts for security personnel.
- 2) Establish tripwires surrounding in the area slightly beyond the fence. Tripwires will be established to enable the generation of alerts when people or vehicles are detected in the areas immediately adjacent to the fence.
- 3) Classify targets approaching or intruding into the fuel depot area. The system will not only detect people, vehicles, etc. approaching or crossing into this area, but will also be able to classify the target and to deliver information on the type of target to security personnel. Target classifications will include not only target types such as people, vehicles, etc. that represent potential threats and should generate alerts. Classifications will also be developed for targets such as wildlife that do not represent a threat and which will be classified in such a way as to allow the development of rules specifying that those target do not generate alerts.
- 4) Detect loitering in the area of interest around the fuel depot. People or vehicles loitering in this area could be planning or attempting some destructive action. A set of rules will, therefore, be implemented enabling the detection of people, vehicles, etc. that remain in this area of interest for over a specified amount of time. If loitering is detected alerts are generated to inform security personnel.
- 5) Detect the presence of bags, packages, or other suspicious objects in the area of interest. Rules will be implemented, therefore, to detect the insertion of any object into the area of interest. This will include bags that are left in the area or bags, packages, etc. thrown over the perimeter fence into the fuel depot. Detection of any object left or thrown into the area will generate an alert to inform security personnel of its presence.
- 6) Detect any possible tampering or attempted tampering with surveillance cameras. People wishing or intending to evade the surveillance system set up to protect the aircraft quarantine area may attempt to do so by tampering with the surveillance cameras set up in the area. Rules will be implemented detecting tampering such as blinding the cameras in some way (covering cameras, spray painting lenses, etc), turning cameras off target, or interrupting either power to the cameras or video feed from the cameras. Detection of any tampering or tampering attempts will generate alerts for security personnel.

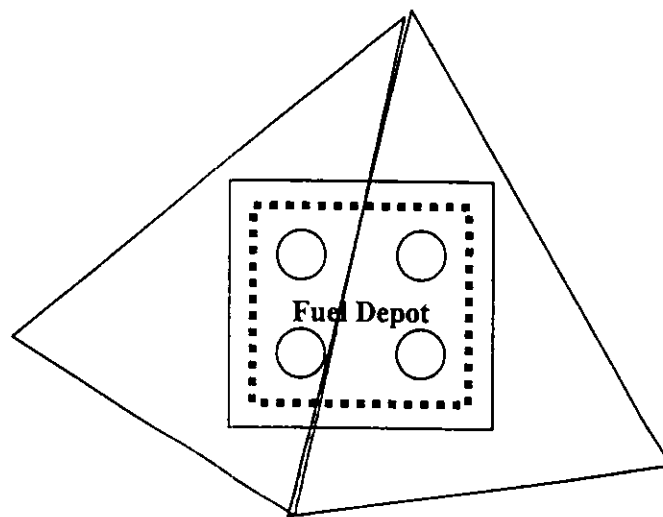


Figure 5: Illustration showing camera coverage of Fuel Depot and surrounding area outside depot perimeter fence. (Cross hatched areas represent camera fields of view. Solid black lines represent tripwires.)